

Remarks/Arguments:

With this amendment, the applicants amend claims 1-14 and add claims 15-21 to more clearly identify the applicants' invention. No new matter has been added. Claims 1-21 are pending.

In reviewing the application, the applicants noticed that the 1449 form filed with the Information Disclosure Statement on April 19, 2002, has not been initialed by the Examiner and returned to the applicants. Accordingly, the applicants respectfully request that the Examiner initial and return the previously-filed 1449 to applicants' undersigned representative.

I. Summary of the Invention

The present invention is directed to a method for separating refuse of mixed materials, and in particular, separating plastics from the refuse of mixed materials. The method includes sorting and separating recycled plastics which have not been previously separated by color or type of plastic. One step in the method includes separating and sorting the mixture of plastics by color into fractions. Another step includes separating and sorting the fractions of color-separated plastics by the type of plastic. The invention also includes a plant that employs this method. The plant washes the refuse of mixed materials containing the plastics and then uses the waste-wash material in a bioreactor to produce methane gas to power the plant separation processes.

II. The Office Action

The Office Action rejects claims 2-14 under 35 U.S.C. § 112, 2nd ¶ as indefinite for failing to particularly point out the applicants' invention. The Office Action also rejects claims 1, 2, and 9 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,555,984 to Sommer, Jr. *et al.*

The applicants note that page 3, paragraph number 5 is absent from the Office Action. Similarly, an analysis of claim 4 with regard to the rejection under Section 112, second paragraph is also absent. The applicants further note that the Office Action does not indicate the status of claims 3-8 and 10-14, other than the rejections under Section 112, second paragraph.

III. Amendments to clarify the claims

Claims 15-21 have been added to clarify the applicants' invention. The subject matter of these claims falls within the broad range or limitation of the claim from which it depends. The applicants submit that with this amendment, the Section 112, second paragraph rejections have been overcome.

IV. Lack of Anticipation

Claims 1, 2, and 9 stand rejected by the Office Action under 35 U.S.C. § 102(b) as anticipated by Sommer, Jr. *et al.* The applicants respectfully disagree because Sommer, Jr. *et al.* does not disclose each and every claim limitation of the present invention.

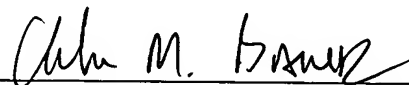
Specifically, Sommer, Jr. *et al.* fails to disclose separating and sorting the mixture of plastics according to colour into fractions, and then separating and sorting the fractions of plastics thus obtained by separation according to colour, according to types of plastic as required by claim 1. Claim 1 clearly identifies two steps of separation and sorting. The first is separation of plastics by colour. After the plastics are separated by colour into like-colour groups or fractions, the different types of plastics, namely, PP and LDPE are also separated.

Sommer, Jr. *et al.* teaches the separation of glass and plastics, predominantly glass, by exposing the glass particles to be separated with a predictable light and scanning the resulting images. The scanner digitizes the image of the glass particles and based upon predetermined values, communicates with an ejector to remove the like-coloured glass particles from the particle feed source. Sommer, Jr. *et al.* is silent regarding further separation of the like-colour particles by the types of material that the particles are made of, that is, by the types of glass.

V. Conclusion

With this amendment, the applicants have more clearly defined their inventive subject matter to overcome the Office Action Section 112, second paragraph rejections. In view of the arguments set forth above, the applicants have also clearly identified that Sommer, Jr. *et al.* fails to teach each and every limitation of the applicants' claimed subject matter. Sommer, Jr. *et al.* fails to teach a second step of separating the like-coloured particles according to the type of material that they are made of. Therefore, the applicants respectfully request the Examiner's reconsideration, submit that the pending claims are in a condition for allowance, and request early notification to that effect.

Respectfully submitted,



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